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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,868	09/28/2006	Klaus Rose	14055.0004FPWO	8198
23552 7590 01/10/2012 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
EXAMINER HORNING, JOEL G				
ART UNIT 1712		PAPER NUMBER		
MAIL DATE 01/10/2012		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/594,868

Applicant(s)

ROSE ET AL.

Examiner

JOEL HORNING

Art Unit

1712

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 January 2012 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-7 and 9-13.

Claim(s) withdrawn from consideration: 14-20.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

12. ☒ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s): 01-03-2012

13. ☒ Other: All claims are rejected for substantially the same reasons presented previously.

/David Turocy/
Primary Examiner, Art Unit 1712

/JOEL G HORNING/
Examiner, Art Unit 1712

Continuation of 11. does NOT place the application in condition for allowance because: The examiner notes that while the inorganic/organic structure that Haas deposits does include vapor deposition step, applicant is correct in stating that the sublayer made with sol-gel precursors is deposited by a liquid phase (e.g. spraying) technique. This is consistent with the last office action. Applicant then argues that the examiner is somehow wrong, but rather Haas uses heat or light energy to disassociate the spray-coated precursor materials. However, as quoted by applicant, the last office action stated: "the material is spray deposited onto a substrate where it is further disassociated and then crosslinked by using heat or light"(emphasis changed).

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, as identified by the applicant and stated in the last office action, Linden teaches that liquid phase (spray) processing methods for these inorganic/organic hybrid materials (like that of Haas) include long solvent removing steps and curing steps. Linden motivates the use of a plasma during deposition instead in order to avoid these problems and produce an improved coating. Goodwin is used to teach dielectric barrier discharge specifically, so Linden does not need to teach it.

Regarding the argument that Linden does not specifically teach using applicant's claimed precursor and the method for making it. However, Haas is being used to teach that limitation, so Linden does not need to. Linden is improving the process of Haas by using plasma to quickly cure the material instead of lengthy solvent removal and curing steps.

Applicant argues that polymers are not organic compounds. If the polymer contains organic material, it can be considered an organic compound. As also cited by applicant Linden at page 9, lines 1-11 discloses that "organosilicon compounds, such as polydimethylsiloxanes (PDMS), can be used with advantage as precursor of the organic as well as of the inorganic component." Linden considered polymers (e.g. polydimethylsiloxane) to be compounds and specifically teaches that they are advantageous to use as the precursor in their process.

Applicant's argument that Linden somehow teaches away from using polymeric precursors and requires a special precursor for the inorganic component is not convincing because as quoted by applicant Linden on page 9 teaches the use of polymeric precursors that are precursors for both the inorganic and organic components of the hybrid material.

Regarding applicants arguments about whether Linden requires completely disassociating the precursor materials and the presence of islands of inorganic material in an organic matrix in the deposited film, whether or not Linden requires these features, the claims do not require these features either, so the arguments are not dispositive to the current claims.

Goodwin does not need to teach the particulars of the precursor used because Haas is being relied upon for those limitations. As stated in the rejection, a person of ordinary skill in the art at the time of invention was motivated to use a dielectric barrier discharge according to Goodwin as the particular plasma source of Haas in view of Linden in order to reduce processing costs and increase processing throughput of the process.